

ELECTRICAL GENERAL NOTES

- ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST NATIONAL ELECTRICAL CODE (N.E.C.), AND SHALL IN ACCORDANCE WITH ALL APPLICABLE STATE CODE REQUIREMENTS AND LOUDOUN COUNTY REQUIREMENTS.
- ALL ELECTRICAL EQUIPMENT SHALL BE UNDERWRITERS LABORATORY (U.L.) LABELED OR LABELED BY AN APPROVED ACCREDITED AGENCY AND TESTING ORGANIZATION.
- PRIOR TO BID, THE CONTRACTOR SHALL EXAMINE ALL PROJECT DOCUMENTS TO DEVELOP A COMPLETE UNDERSTANDING OF THE PROJECT SCOPE. FAILURE TO REVIEW ALL CONTRACT DRAWINGS AND EXISTING CONDITIONS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM ALL WORK REQUIRED. THE CONTRACTOR SHALL, UPON REVIEW OF THE DRAWINGS ADVISE THE OWNER OF ANY DISCREPANCIES WHICH WILL AFFECT THE WORK REQUIRED.
- IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO INDICATE FINISHED WORK THAT IS FULLY ADJUSTED, TESTED, AND READY FOR OPERATION. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN "FURNISH AND INSTALL COMPLETE AND READY FOR USE", UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL FURNISH, INSTALL, WIRE, CONNECT, AND ENERGIZE THE COMPLETE FUNCTIONAL SYSTEMS REQUIRED, INCLUDING EQUIPMENT, DEVICES, WIRING, AND ALL OTHER APPURTENANCES AND HARDWARE FOR A COMPLETE SYSTEM.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS NECESSARY FOR THE COMPLETE INSTALLATION OF THE EQUIPMENT AS REQUIRED BY CODE WITHOUT ADDITIONAL COST TO THE OWNER, REGARDLESS WHETHER THE ITEMS ARE INDICATED IN THE CONTRACT DRAWINGS OR SPECIFICATIONS. SUCH ITEMS COULD BE, BUT ARE NOT LIMITED TO, SUPPORTS, WIRING, START-UP AND SERVICE, ETC.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL A FIRST CLASS SYSTEM AND SHALL COMPLETELY COORDINATE WITH ALL OTHER TRADES.
- ALL CONFLICTS WHICH MAY PREVENT THE COMPLETION OF WORK SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL NOT PROCEED WITH RELATED WORK UNTIL THE CONFLICT IS RESOLVED.
- THE CONTRACTOR SHALL INSTALL ALL ELECTRICAL DEVICES AND ELECTRICAL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- ALL EQUIPMENT, DEVICES, AND RELATED APPURTENANCES SHALL BE THE LATEST PRODUCT OF THE SPECIFIED MANUFACTURERS UNLESS OTHERWISE NOTED.
- THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE ALL COMPONENTS AND ACCESSORIES REQUIRED FOR THE COMPLETE INSTALLATION. THE CONTRACTOR SHALL PROVIDE SUCH ITEMS TO COMPLETE THE ENTIRE SYSTEM AND PLACE IN PROPER OPERATION IN ACCORDANCE WITH APPLICABLE CODES, INDUSTRY STANDARDS, AND EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
- LOCATIONS OF EQUIPMENT, LIGHTING FIXTURES, DEVICES, ETC. ARE INDICATED DIAGRAMMATICALLY ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN EXACT LOCATIONS AND ESTABLISH EXACT DIMENSIONS ON THE JOB SITE AFTER STUDYING THE CONDITIONS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS, MOUNTING METHODS, AND DIMENSIONS OF LIGHT FIXTURES, LIFE SAFETY DEVICES, CEILING DEVICES, RECEPTACLES, TELEPHONE AND DATA OUTLETS, AND OTHER ITEMS VISIBLE IN PUBLIC AREAS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND ARRANGE FOR ALL INSPECTIONS BY LOCAL AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL ADDITIONAL CONDUIT, DEVICES, AND FITTINGS WITHOUT ADDITIONAL COST TO THE OWNER, AS REQUIRED TO ASSURE THE ELECTRICAL SYSTEMS ARE INSTALLED PROPERLY AND IN ACCORDANCE WITH CODE.
- THE CONTRACTOR SHALL INSTALL ALL ELECTRICAL SYSTEMS SO AS TO NOT INTERFERE WITH THE PLUMBING, STRUCTURAL, AND ARCHITECTURAL SYSTEMS.
- ALL ELECTRICAL SYSTEMS, DEVICES, AND RELATED ITEMS SHALL BE TESTED AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL REPLACE ANY AND ALL DEFECTIVE DEVICES, ITEMS, OR SYSTEMS AT COMPLETION OF THE PROJECT.
- ANY EQUIPMENT INCLUDING TELEPHONE/DATA CABLE LOCATED WITHIN A RETURN AIR PLENUM SHALL BE RATED FOR SUCH APPLICATION IN ACCORDANCE WITH APPLICABLE REGULATIONS.
- STRUCTURAL COMPONENTS SHALL BE X-RAYED PRIOR TO CUTTING OR DRILLING, AND SHALL NOT BE CUT, DRILLED OR MODIFIED IN ANY WAY WITHOUT REVIEW AND WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
- THE CONTRACTOR SHALL PERFORM THE FOLLOWING EQUIPMENT CONNECTIONS AS REQUIRED BY THE EQUIPMENT MANUFACTURER OR AS INDICATED IN THE CONTRACT DOCUMENTS: EXTEND AND CONNECT TO EQUIPMENT; MOUNT AND CONNECT TO STARTERS; INSTALL PUSH BUTTON STATION AND THERMAL OVERLOAD DEVICES; FURNISH SUITABLE RECEPTACLES, PLUG, COVER PLATE, CORD, ARMORED CABLE, WIRE, DIRECT CONNECTIONS, DISCONNECT SWITCHES, ETC.
- THE MECHANICAL CONTRACTOR SHALL FURNISH MOTOR STARTERS FOR MECHANICAL EQUIPMENT AND THE STARTERS SHALL BE INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR.
- EXACT LOCATION AND MOUNTING HEIGHTS OF JUNCTION BOXES, OUTLETS, STUB-UPS, ETC. SHALL BE DETERMINED FROM CONTRACT DOCUMENTS, EQUIPMENT DETAILS, SPECIFICATIONS WHERE APPLICABLE, AND MANUFACTURER'S ROUGH-IN DRAWINGS.
- ALL LIGHTING FIXTURE LOCATIONS SHALL BE COORDINATED WITH THE REFLECTED CEILING PLANS, ARCHITECTURAL SECTIONS AND DETAILS, MECHANICAL AND PLUMBING DRAWINGS AND SYSTEMS. SHOULD A DISCREPANCY ARISE, NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY.
- ELECTRICAL EQUIPMENT REQUIRING ACCESS SUCH AS JUNCTION BOXES, CONNECTIONS TO EQUIPMENT, ETC. SHALL NOT BE INSTALLED ABOVE INACCESSIBLE CEILINGS OR BEHIND WALLS.
- ALL GROUNDING SHALL BE DONE AS PER N.E.C. REQUIREMENTS. THE CONTRACTOR SHALL USE GREEN GROUND WIRE FOR GROUNDING.
- ALL BRANCH CIRCUIT WIRING ON THE DRAWINGS THAT IS UNMARKED INDICATES TWO CURRENT CARRYING CONDUCTORS AND A GROUNDING CONDUCTOR.
- THE ACTUAL NUMBER OF WIRES FOR EACH CIRCUIT ARE NOT INDICATED ON THE DRAWINGS UNLESS NECESSARY FOR CLARIFICATION. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON THE DRAWINGS OR NOT.
- PROVIDE NFPA APPROVED FIRE STOPPING AT ALL PIPING AND CONDUIT PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND COMPONENTS.
- THE CONTRACTOR SHALL REFER TO MECHANICAL/PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL/PLUMBING EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY VOLTAGE/PHASE INDICATED ON ELECTRICAL DRAWINGS WITH MECHANICAL/PLUMBING EQUIPMENT TO BE PROVIDED PRIOR TO PROVIDING ELECTRICAL CONNECTION. SHOULD A DISCREPANCY BE NOTED BETWEEN EQUIPMENT TO BE SUPPLIED AND WHAT IS INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN WRITTEN DIRECTION FROM OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, MATERIALS, EQUIPMENT, AND RELATED ITEMS FOR A PERIOD AFTER ACCEPTANCE OF THE PROJECT BY THE OWNER AND REPLACE ANY DEFECTIVE MATERIALS, EQUIPMENT, AND RELATED ITEMS WITHIN THE GUARANTEE PERIOD. THE PERIOD SHALL BE TWELVE MONTHS FROM THE ACCEPTANCE OF THE PROJECT UNLESS SPECIFIED OTHERWISE IN THE SPECIFICATIONS OR CONTRACT DOCUMENTS.
- IN THE EVENT THAT ANY OWNER FURNISHED EQUIPMENT, DEVICES, OR MATERIAL BECOMES DAMAGED AFTER RECEIPT FROM OWNER, THE CONTRACTOR SHALL REPLACE THE EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
- ALL SWITCHES, RECEPTACLES, AND TELEPHONE/DATA OUTLETS SHOWN ON THE DRAWINGS IN THE SAME LOCATION SHALL BE INSTALLED IN MULTIPLE GANG BOXES MOUNTED IN A COMMON COVER PLATE UNLESS OTHERWISE NOTED. POWER SYSTEMS SHALL NOT BE INSTALLED IN THE SAME BOX WITH TELEPHONE/DATA. THE CONTRACTOR SHALL PROVIDE DIVIDER AS REQUIRED BY LOCAL CODES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELBOARDS. UNLESS OTHERWISE NOTED, THREE SINGLE-PHASE CIRCUITS MAY BE COMBINED IN ONE CONDUIT WITH A COMMON NEUTRAL, PROVIDED EACH CIRCUIT IS ON AN OPPOSITE PHASE.
- RECEPTABLES MOUNTED WITHIN 6'-0" OF SINKS SHALL BE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE.
- THE CONTRACTOR SHALL PROVIDE 3/4" EMPTY CONDUIT WITH PULL STRING FROM ALL TELEPHONE, DATA, WALL MOUNTED SPEAKERS, AND TELEVISION OUTLETS UP FROM JUNCTION BOX TO ACCESSIBLE CEILING UNLESS OTHERWISE NOTED. GROMMETS SHALL BE PROVIDED AT THE END OF THE CONDUIT AT THE CEILING SPACE.
- ALL ELECTRICAL EQUIPMENT INCLUDING DISCONNECT SWITCHES LOCATED OUTSIDE OF THE BUILDING SHALL BE WEATHERPROOF, NEMA 4X.
- ALL CONDUCTORS SHALL BE COPPER WITH TYPE THW OR THHN 75°C INSULATION, NO. 12 AWG MINIMUM UNLESS OTHERWISE NOTED.
- ALL PANELBOARDS AND DISCONNECT SWITCHES SHALL HAVE COPPER BUS AND APPURTENANCES.
- ALL 20 AMP 120V/208V HOMERUNS LONGER THAN 75 FEET SHALL BE MINIMUM #10 AWG AND ALL 20 AMP 277V/480V HOMERUNS LONGER THAN 150 FEET SHALL BE MINIMUM #10 AWG.
- ALL WIRING SHALL BE COPPER CONDUCTORS UNLESS OTHERWISE NOTED. ALL WIRING #10 AND LESS SHALL BE SOLID CONDUCTOR.
- THE CONTRACTOR SHALL VERIFY WITH DOOR SWING BEFORE INSTALLING LIGHT SWITCH OUTLETS. INSTALL LIGHT SWITCH OUTLET ON LOCKING SIDE OF THE DOOR, OR AS NOTED ON PLANS.
- LIGHTING FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE ABOVE AND SHALL BE INDEPENDENT OF THE CEILING GRID SYSTEM.
- ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FEET SHALL BE PROVIDED WITH A PULL WIRE OR FISH TAPE/CORD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SIZING OF ALL MOTOR OVERLOAD DEVICES (HEATERS) IN STARTERS BASED ON ACTUAL NAMEPLATE RATINGS ON THE MOTORS BEING INSTALLED.
- THE CONTRACTOR SHALL NOTE U.L. LABEL/NAMEPLATE ON MECHANICAL EQUIPMENT, OR IF THE LOCAL INSPECTOR REQUIRES THE OVERCURRENT PROTECTIVE DEVICES TO BE FUSED, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A FUSED DISCONNECT SWITCH WITH PROPER SIZED FUSES AT THE SWITCH LOCATION AS INDICATED ON THE DRAWINGS.
- ALL DUPLEX RECEPTACLES ON DEDICATED CIRCUITS SHALL BE NEMA 5-20R, UNLESS OTHERWISE NOTED.
- METALLIC CONDUIT WITH CONDUCTORS SHALL BE USED IN LIEU OF CABLE IN ALL VISIBLE PUBLIC AREAS AND BACK OF HOUSE LOCATIONS. "MC" CABLE SHALL NOT BE TERMINATED AT PANELBOARDS. CABLE SHALL TERMINATE OUTSIDE OF ELECTRICAL CLOSETS AND ROOMS WITH GUTTERS. CONDUIT SHALL BE USED TO CONNECT GUTTERS TO PANELS.
- RECEPTACLE NEUTRAL CONDUCTOR(S) SHALL BE A MINIMUM #10 AWG AT POINT WHERE MORE THAN ONE 20 AMP PHASE CONDUCTOR IS CONNECTED TO A COMMON NEUTRAL BACK TO PANELBOARD.
- NEW DIRECTORY CARDS FOR EACH PANELBOARD SHALL BE PROVIDED AT COMPLETION OF WORK WITH TYPED DESIGNATIONS INDICATING NAME, VOLTAGE, PHASE, ETC. AND FINAL CIRCUITING DEPICTING EACH POLE POSITION IN A TWO COLUMN FASHION. ROOM NUMBERS SHALL BE USED WHENEVER POSSIBLE ON CIRCUIT DESIGNATIONS.
- AFTER FINAL INSTALLATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FILLING ALL VOIDS AROUND CONDUIT PENETRATIONS AND OTHER CORE DRILLS/OPENINGS IN SLAB AND/OR WALLS WITH A FIRE SATING MASTIC. FILL SHALL EQUAL FIRE RATING OF SLAB OR WALL.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR ON ANY REQUIRED CONTROL CIRCUITS INCLUDING "LINE" AND "LOW" VOLTAGE POWER REQUIREMENTS. THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY "LINE" OR "LOW" VOLTAGE CONDUIT TO NEW ELECTRIC THERMOSTATS, DAMPERS OR OTHER ACTUATORS AND CONTROL EQUIPMENT. WIRE AND CABLES BY MECHANICAL CONTRACTOR. CONTROL SYSTEMS FOR NEW MECHANICAL SYSTEMS SHALL BE COMPLETE AND OPERATIONAL.
- ALL CONDUITS SHALL BE RIGIDLY SUPPORTED TIGHT TO THE BUILDING STRUCTURE. THE MAXIMUM SPACING OF SUPPORTS SHALL BE 10'-0" FOR VERTICAL RUNS AND 8'-0" FOR HORIZONTAL RUNS.
- CONDUIT/CABLE SHALL BE PROVIDED AS FOLLOWS:
EXTERIOR: ALL EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL WITH GALVANIZED THREADED FITTINGS.
MOTORS: FINAL CONNECTION TO MOTORS SHALL BE U.L. LISTED LIQUID TIGHT FLEX. (MINIMUM 24" LONG).
EXPOSED INTERIOR: ALL EXPOSED INTERIOR WIRING SHALL BE IN GALVANIZED STEEL WITH THREADED CONNECTORS OR ELECTRONIC METALLIC TUBING WITH STEEL SET SCREW CONNECTORS.
CABLE: BRANCH CIRCUIT WIRING CONCEALED IN A WALL OR CEILING CONNECTING RECEPTABLES AND LIGHTS MAY BE "MC" CABLE WITH INSULATED GROUNDING CONDUCTOR AND U.L. LISTED FITTINGS.
- CONTRACTOR SHALL FOLLOW LOUDOUN COUNTY FIRE ALARM INSPECTION PROCEDURES, TELECOMMUNICATIONS GUIDE LINES, AND SYSTEM FURNITURE STANDARDS.
- REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.

ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION
A	AMPERE
ABV	ABOVE
AFG	ABOVE FINISHED GRADE
AFF	ABOVE FINISHED FLOOR
AIC	ASYMMETRICAL INTERRUPT CURRENT
ARCH	ARCHITECTURAL
ATC	AUTOMATIC TEMPERATURE CONTROL
AWG	AMERICAN WIRE GAUGE
BLW	BELOW
C	CONDUIT
C/B	CIRCUIT BREAKER
CATV	CABLE TELEVISION
CF	COMPACT FLUORESCENT
CLG	CEILING
CRT	CIRCUIT
C/T	CURRENT TRANSFORMER
DED	DEDICATED
DIST	DISTRIBUTION
DN	DOWN
DWG	DRAWING
EA	EACH
EC	EMPTY CONDUIT
EG	EQUIPMENT GROUND
ELEC	ELECTRICAL
EM	EMERGENCY
EXH	EXHAUST
EW	ELECTRIC WATER COOLER
FA	FIRE ALARM
FAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FLR	FLOOR
FS	FUSE SWITCH
FSS	FUSED SAFETY SWITCH
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HD	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HVAC	HEATING VENTILATION AIR CONDITIONING
HZ	HERTZ
IG	ISOLATED GROUND
J-BOX	JUNCTION BOX
K	THOUSAND
KVA	KILOVOLT AMPERES
KW	KILOWATT
LC	LIGHTING CONTROLLER
LF	LINEAR FOOT
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCN	THOUSAND CIRCULAR MILLS
MDP	MAIN DISTRIBUTION PANEL
MECH	ELECTRICAL
MH	METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRIC CODE
NFSS	NON-FUSED SAFETY SWITCH
NL	NIGHT LIGHT
P	POLES
PC	PHOTOCELL
PNL	PANEL
RECEPT	RECEPTACLE
SECT	SECTION
SWBD	SWITCHBOARD
TEL	TELEPHONE
TS	TAMPER SWITCH
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UC	UNDER COUNTER
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VO	VOLTAGE DROP
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
W/	WITH
WG	WIREGUARD
WH	WATER HEATER
WP	WEATHERPROOF
XFMR	TRANSFORMER
Y	WYE CONNECTION
Δ	DELTA CONNECTION
Ø or Ph	PHASE

ELECTRICAL SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FLUORESCENT LIGHTING FIXTURE.		PHOTOCELL ROOFTOP OR WALL MOUNTED, MODEL NO. AS NOTED ON PLANS.
	FLUORESCENT LIGHTING FIXTURE.		CLOCK OUTLET ON MASTER SYSTEM CLOCK
	RECESSED MOUNTED LIGHTING FIXTURE, DOWNLIGHT.		FIRE ALARM SPEAKER/VISUAL TYPE SIGNALING DEVICE FLUSH MOUNTED 6'-8" ABOVE FINISHED FLOOR TO BOTTOM, UNLESS OTHERWISE NOTED. DEVICE SHALL BE 75 CANDELA, UNLESS OTHERWISE NOTED WITH SUBSCRIPT ON FLOOR PLAN.
	WALL MOUNTED LIGHTING FIXTURE.		FIRE ALARM VISUAL ONLY TYPE SIGNALING DEVICE FLUSH MOUNTED 6'-8" ABOVE FINISHED FLOOR TO BOTTOM, UNLESS OTHERWISE NOTED. DEVICE SHALL BE 75 CANDELA, UNLESS OTHERWISE NOTED WITH SUBSCRIPT ON FLOOR PLAN.
	FLUORESCENT LIGHTING FIXTURE BUILT-IN EMERGENCY OPERATION.		FIRE ALARM MANUAL PULL STATION FLUSH MOUNTED 4'-0" ABOVE FLOOR.
	DOWNLIGHT FIXTURE BUILT-IN EMERGENCY OPERATION.		DATA ONLY TELECOMMUNICATION OUTLET FLUSH MOUNTED 18" ABOVE FLOOR, UNLESS OTHERWISE NOTED. PROVIDE 3/4" EC WITH PULLSTRING TO 6" ABOVE ACCESSIBLE CEILING.
	FLUORESCENT OR STRIP LIGHTING FIXTURE.		TELEPHONE OUTLET FLUSH MOUNTED 18" ABOVE FLOOR UNLESS OTHERWISE NOTED. PROVIDE 3/4" EC WITH PULLSTRING TO 6" ABOVE ACCESSIBLE CEILING.
	EXIT LIGHTING FIXTURE CEILING OR WALL MOUNTED, DIRECTIONAL ARROWS AS INDICATED ON PLANS.		TAMPER SWITCH CONNECTED TO FIRE ALARM SYSTEM.
	EXIT/BATTERY PACK UNIT		FLOW SWITCH CONNECTED TO FIRE ALARM SYSTEM.
	REMOTE EMERGENCY HEAD.		NON-FUSIBLE
	ARCHITECTURAL LIGHTING FIXTURE. DESIGNATION AS NOTED WITH SUBSCRIPTION NEXT TO FIXTURE SYMBOL.		FUSIBLE SAFETY SWITCH.
	LIGHTING FIXTURE DESIGNATION LETTER AND/OR INDICATES TYPE.		MOTOR STARTER (FURNISHED BY DIVISION 15 CONTRACTOR, INSTALLED BY THIS CONTRACTOR).
	SINGLE POLE FLUSH TUMBLER SWITCH MOUNTING HEIGHT 4'-0" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON DRAWINGS.		SURFACE MOUNTED LOW VOLTAGE DISTRIBUTION PANELBOARD, PANEL DESIGNATION AS NOTED ON PLANS.
	THREE OR FOUR WAY FLUSH TUMBLER SWITCH, MOUNTING HEIGHT 4'-0" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON DRAWINGS.		SURFACE MOUNTED LOW VOLTAGE BRANCH PANELBOARD, PANEL DESIGNATION AS NOTED ON PLANS.
	DUPLEX RECEPTACLE, 2P, 3W, 20A, 125V, NEMA 5-20R, FLUSH MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON DRAWINGS.		SURFACE MOUNTED HIGH VOLTAGE BRANCH PANELBOARD, PANEL DESIGNATION AS NOTED ON PLANS.
	QUADRUPLEX RECEPTACLE 2P, 3W, 20A, 125V, NEMA 5-20R.		WALL MOUNTED SPECIAL SYSTEM MAIN OR SUB-DISTRIBUTION EQUIPMENT ENCLOSURE AS NOTED. SYSTEM TYPE AS INDICATED ON FLOOR PLANS.
	GROUND FAULT CIRCUIT INTERRUPTER SAFETY TYPE DUPLEX RECEPTACLE, 2P, 3W, 20A, 125V, NEMA 5-20R FLUSH MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON DRAWINGS.		BRANCH CIRCUIT HOMERUN TO PANELBOARD. NUMBER OF SHORTER CROSSMARKS INDICATE NUMBER OF PHASE CONDUCTORS. UNLESS OTHERWISE NOTED, CONNECT CIRCUIT TO A SINGLE POLE. 20 AMP BRANCH CIRCUIT BREAKER IN PANELBOARD INDICATED. EQUIPMENT GROUND WIRE IS INDICATED WITH DOT. PROVIDE GROUND WIRE IN ACCORDANCE WITH PROJECT SPECIFICATIONS. LONGER CROSSMARK INDICATES NEUTRAL.
	GROUND FAULT CIRCUIT INTERRUPTER TYPE DUPLEX RECEPTACLE, 2P, 3W, 20A, 125V, NEMA 5-20R, FLUSH MOUNTED 44" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON DRAWINGS.		BRANCH CIRCUIT WIRING CONCEALED IN CEILING OR WALLS. CROSSMARKS INDICATE NO. OF CONDUCTORS FOR CLARIFICATION WHERE NECESSARY. EQUIPMENT GROUND WIRE IS NOT INDICATED. PROVIDE GROUND WIRE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
	FLOOR MOUNTED TWO (2) DUPLEX RECEPTACLES AND TWO (2) TELECOMM. OUTLETS. PROVIDE BRASS COVER FLUSH WITH FLOOR COVERING.		BRANCH CIRCUIT WIRING CONCEALED IN FLOOR, IN CEILING SPACE BELOW, OR BELOW FINISHED GRADE.
	FLOOR MOUNTED QUAD RECEPTACLE, 2P, 3W, 20A, 125V, NEMA 5-20R. PROVIDE BRASS COVER FLUSH WITH FLOOR COVERING.		REFERENCED PLAN NOTE DESIGNATION.
	SPECIAL RECEPTACLE.		PLAN OR DETAIL NUMBER DRAWING WHERE PLAN OR DETAIL APPEARS
	JUNCTION BOX ABOVE CEILING OR WALL MOUNTED.		RACEWAY UP.
	MOTOR OUTLET.		RACEWAY DOWN.
	MANUAL MOTOR CONTROLLER.		SCHEDULE NOTE DESIGNATION.
	CEILING MOUNTED SMOKE DETECTOR.		CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY TYPE, BY WATTSTOPPER CAT. NO. DT-355
	AIR DUCT TYPE SMOKE DETECTOR WITH REMOTE INDICATING LIGHT.		CAP-OFF CONDUIT BELOW GRADE.
	HEAT DETECTOR, CEILING MOUNTED.		POWER DROP FOR SYSTEM FURNITURE. COORDINATE WITH OWNER FOR TERMINATIONS.
	ELECTRICAL CONNECTION TO EQUIPMENT		DATA DROP FOR SYSTEM FURNITURE. COORDINATE WITH OWNER FOR TERMINATIONS.
	CEILING MOUNTED SPEAKER		
	TV OUTLET WALL MOUNTED. COORDINATE WITH OWNER FOR MOUNTING HEIGHT.		
	TLT/PAN/ZOOM CAMERA OUTLET LOCATION. COORDINATE WITH SECURITY VENDOR FOR ROUGH-INS.		
	FIXED CAMERA OUTLET LOCATION. COORDINATE WITH SECURITY VENDOR FOR ROUGH-INS.		
	CAMERA OUTLET LOCATION. COORDINATE WITH SECURITY VENDOR FOR ROUGH-INS.		
	CARD READER OUTLET LOCATION. COORDINATE WITH SECURITY VENDOR FOR ROUGH-INS.		
	MINI DOME CAMERA OUTLET LOCATION. COORDINATE WITH SECURITY VENDOR FOR ROUGH-INS.		

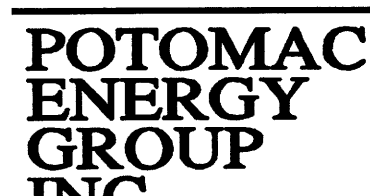


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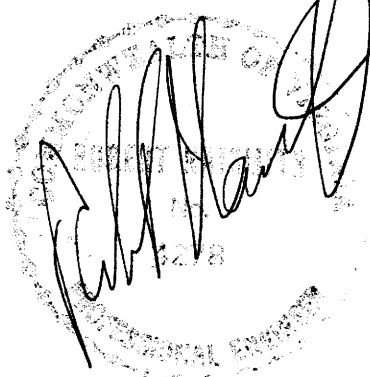


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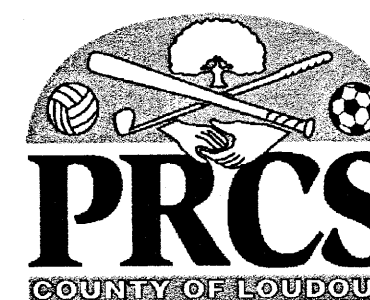


DULLES SOUTH MULTI-PURPOSE FACILITY

PHASE I

LOUDOUN COUNTY, VIRGINIA

COVER SHEET - ELECTRICAL



No.	DATE	DESCRIPTION
1.	03-28-06	CD COORDINATION
2.	04-13-06	CD SUBMISSION
3.	06-22-06	MD 65% SUBMISSION
4.	09-21-06	60% CD SUBMISSION
5.	11-10-06	85% CD SUBMISSION
6.	12-05-06	PERMIT SET
7.	01-18-07	BID SET
8.	03-06-07	ADDENDUM 1

SCALE: NONE
DRAWN BY: JP
CHECKED BY: GV
WBA REF. NO. A55019

DATE: 01-18-07
PHASE: Bldg S/H

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